

IN THE CLAIMS

1. (original) A method for preparing a Li-Mn-Ni oxide for a lithium secondary battery having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2]$ ($0.05 < X < 0.6$), comprising the steps of:

a) preparing an aqueous solution by resolving lithium salt, manganese salt and nickel salt into distilled water;

b) forming gel by heating the aqueous solution;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant;
and

e) performing a second thermal treatment on the resultant powder, and grinding the resultant.

2. (original) The method as recited in claim 1, wherein the lithium salt, manganese salt and nickel salt are water-soluble salts.

3. (original) The method as recited in claim 1, wherein the lithium salt is lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), and the manganese salt and the nickel salt are manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$), respectively.

4. (original) The method as recited in claim 1, wherein the gel is burnt at a temperature of $400 \sim 500^\circ C$.

5. (original) The method as recited in claim 1, wherein the first thermal treatment is performed at a temperature of $400 \sim 500^\circ C$.

6. (original) The method as recited in claim 1, wherein the second thermal treatment is performed at a temperature of $700 \sim 1000^\circ C$.

7. (original) A method for preparing a Li-Mn-Ni oxide for a lithium secondary battery having

a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2]$ ($0.05 < X < 0.6$), comprising the steps of: a) preparing an aqueous solution by resolving lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$) into distilled water;

b) forming gel by heating the aqueous solution at over 100° C.;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant;

and

e) performing a second thermal treatment on the resultant powder at a temperature of 700 ~ 1000 ° C, and grinding the resultant.

8. (withdrawn) A Li-Mn-Ni oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2]$ ($0.05 < X < 0.6$) prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium salt, manganese salt and nickel salt into distilled water;

b) forming gel by heating the aqueous solution;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant;

an

e) performing a second thermal treatment on the resultant powder, and grinding the resultant.

9. (withdrawn) A Li-Mn-Ni oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2]$ ($0.05 < X < 0.6$) prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$) into distilled water;

b) forming gel by heating the aqueous solution at over 1000 ° C;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant;

and

e) performing a second thermal treatment on the resultant powder at a temperature of 700 ~ 1000 ° C, and grinding the resultant.

10. (withdrawn) A lithium secondary battery including a Li-Mn-Ni oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2]$ ($0.05 < X < 0.6$) which is prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium salt, manganese salt and nickel salt into distilled water;

b) forming gel by heating the aqueous solution;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant;

and

e) performing a second thermal treatment on the resultant powder, and grinding the resultant.

11. (withdrawn) A lithium secondary battery including a Li-Mn-Ni oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2]$ ($0.05 < X < 0.6$) prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$) into distilled water;

b) forming gel by heating the aqueous solution at over 100 ° C;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant;

an

e) performing a second thermal treatment on the resultant powder at a temperature of 700 ~ 1000 ° C, and grinding the resultant.